

CITY OF HAYWARD AGENDA REPORT

AGENDA DATE 07/23/02

AGENDA ITEM 2

WORK SESSION ITEM

TO:

Mayor and City Council

FROM:

Director of Public Works

SUBJECT:

Water System Vulnerability Assessment

RECOMMENDATION:

It is recommended that the City Council adopt the attached resolutions, which:

- 1. Authorize the City Manager to execute an agreement for consulting services between the City and Brown and Caldwell for the preparation of a Water System Vulnerability Assessment in an amount not to exceed \$112,000; and
- 2. Appropriate \$115,000 from the Water System Capital Improvement Fund for preparation of a Water System Vulnerability Assessment and staff training.

BACKGROUND:

On May 7, 2002, the City Council authorized the City Manager to submit an application to the United States Environmental Protection Agency (EPA) for grant funding to prepare a vulnerability assessment of the Hayward Municipal Water System and update the Water System's Emergency Operations Plan. The grants were available as part of the EPA's effort to assess the safety and security of the nation's drinking water supply. The EPA has awarded to the City a grant of \$115,000, which is the maximum amount offered to large water agencies under the grant program. Due to the specialized technical knowledge needed to prepare an effective vulnerability assessment of the Water System, it is proposed that the City enter into an agreement with a qualified consulting firm for this work.

A vulnerability assessment is comprised of a systematic analysis of water system components to identify potential malevolent risks and susceptible facilities, an evaluation of events that could affect delivery of water to customers, and an assessment of the likelihood of such events occurring. Sandia National Laboratories has developed the Risk Assessment Methodology for Water Systems (known as RAM-W) specifically for water utilities. This methodology provides a structured process for quantifying and evaluating risk. It is recommended by the EPA for vulnerability assessments and will be utilized in the Hayward study.

In accordance with the RAM-W methodology, the consultant generally will:

- Review the major components of the Hayward Water System to determine the critical components needed to carry out the System's primary mission;
- Evaluate potential malevolent activities to determine their likelihood and consequences;
- Evaluate existing security measures; and
- Recommend cost-effective security enhancements.

Upon completion of the assessment, staff will prioritize the proposals for consideration as part of the Capital Improvement Program and implement procedural changes, as appropriate.

CONSULTANT SELECTION:

The City issued requests for proposal to six firms experienced in utility risk assessment, qualified to perform the RAM-W methodology, and knowledgeable about water utility systems. Five proposals were received. The selection committee reviewed the submittals to evaluate each firm's experience with similar types of risk assessments, and the qualifications and experience of the key personnel to be assigned to the project. Based on this review, staff recommends entering into an agreement with Brown and Caldwell. This firm offers the best combination of applicable risk assessment experience, well-qualified team members, knowledge of water utilities, and a reasonable fee schedule. Brown and Caldwell's fee, while not the lowest submitted, is within the acceptable range for this type of work.

The EPA has conditioned the grant funding upon completion of the vulnerability assessment before December 31, 2002. Brown and Caldwell has indicated and agreed that they will be able to meet the deadline.

FUNDING:

Vulnerability Assessment	\$112,000
Staff Training	3,000
Total:	\$115,000

The agreement with Brown and Caldwell will not exceed \$112,000, including provision of extra services. The EPA grant will cover the cost of the assessment. The \$3,000 remaining in the grant will be used to train City staff in the RAM-W methodology. Since availability of the grant funding was not known in time to be included in the 2002-03 Water Capital Improvement Program budget, it is necessary to appropriate the requested \$115,000 now. The fund will be reimbursed from the grant.

Prepared by:

Alex Ameri, Deputy Director of Public Works

Recommended by:

Dennis L. Butler, Director of Public Works

Approved by:

Jesús Armas, City Manager



RESOLUTION NO	
Introduced by Council Member	

RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT BETWEEN THE CITY OF HAYWARD AND BROWN AND CALDWELL FOR CONSULTING SERVICES FOR THE PREPARATION OF A WATER SYSTEM VULNERABILITY ASSESSMENT, PROJECT NOS. 7165

City Attorney of the City of Hayward



HAYWARD CITY COUNCIL

RESOLUTION NO	
Introduced by Council Member	

RESOLUTION AMENDING RESOLUTION 02-087, AS AMENDED, THE BUDGET RESOLUTION FOR CAPITAL PROJECTS FOR FISCAL YEAR 2002-2003, RELATING TO AN APPROPRIATION OF FUNDS FOR THE WATER SYSTEM VULNERABILITY ASSESSMENT, PROJECT NO. 7165

BE IT RESOLVED by the City Council of the City of Hayward that Resolution No. 02-087, as amended, the Budget Resolution for Capital Projects for fiscal year 2002-2003, is hereby amended by approving an appropriation of \$115,000 from the Capital Improvement Fund, Fund 622 to the Water System Vulnerability Assessment, Project No. 7165.

IN COUNCIL, HAYWARD, CALIFORNIA, 2002	
ADOPTED BY THE FOLLOWING VOTE:	
AYES: COUNCIL MEMBERS: MAYOR:	
NOES: COUNCIL MEMBERS:	
ABSTAIN: COUNCIL MEMBERS:	
ABSENT: COUNCIL MEMBERS:	
ATTEST: City Clerk of the City of H	ayward
APPROVED AS TO FORM:	
City Attorney of the City of Hayward	